



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,984	06/30/2003	Kang Soo Seo	46500-00034/US	6983
30593 7590 10/15/2009 HARNES, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195				
EXAMINER				
ZHAO, DAQUAN				
ART UNIT		PAPER NUMBER		
2621				
MAIL DATE		DELIVERY MODE		
10/15/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/607,984

Applicant(s)

SEO ET AL.

Examiner

DAQUAN ZHAO

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 5, 7, 8, 12, 16-25, 27-29 and 31-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 5, 7, 8, 12, 16-25, 27-29 and 31-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 5/8/2009; 9/22/2009.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 4-5, 7-8, 12, 14-25 and 27-39 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-5, 7-8, 12, 16-25, 27-29, and 31-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al (US 2005/0,025,461), and further in view of Taira et al (US 2003/0,113,096 A1).

For claim 1, Kato et al teach a recording medium storing a data structure for managing reproduction of at least video data by a reproducing apparatus, comprising:

One or more navigation management file for managing reproduction of the video data, the video data being stored in at least once clip file, each navigation management file associated with one or the clip files (e.g. figure 13, paragraph 210-211, the CPI corresponds to navigation management file), said navigation management file including at least one entry point map, the entry point map mapping a presentation time stamp to an address for a corresponding entry point in the video data, each entry point map for identifying entry pins in the video data, the entry point map having angle change

information associated with the entry point (e.g. paragraph 212, the EP_map is one of the CPI that associates the PTS with the address of the information),

However, Kato et al fail to teach the video data having multiple reproduction path; the angle change information indicates whether an angle change is permitted or not, and the angle change information further indicates where the angle change is permitted, the angle change from a current angle to a requested angle is performed if the angle change is permitted, and the current angle is maintained until a position at which exit of the current angle is permitted and the angle is changed automatically from the current angle to the requested angle. Taira et al teach the video data having multiple reproduction path; the angle change information indicates whether an angle change is permitted or not, and the angle change information further indicates where the angle change is permitted, the angle change from a current angle to a requested angle is performed if the angle change is permitted, and the current angle is maintained until a position at which exit of the current angle is permitted and the angle is changed automatically from the current angle to the requested angle (e.g. abstract, paragraph 17, figure 31, and figure 34 step ST56, ST58, playback the current ILVU to the end and search destination address of angle after the playback of the current ILVU is completed). It would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the teaching of Taira et al into the teaching of Kato et al to provide a multi-angle automatic switching/playback system for user to easily recognize angle change.

Claims 16, 17, 18, 19, 20 and 24 are rejected for the same reason as discussed in claim 1 above.

For claim 4, Taira et al teach the angle change information corresponds to each of the plurality of video data blocks (e.g. figure 15), each video data block including at least one entry point (e.g. figure 15, shows the VOB, which can be entry point), said navigation management file includes a start point of a presentation time stamp, said start point of the presentation time stamp is corresponding to one of said plurality of video data blocks (e.g. figure 11, start presentation time of VOB).

For claim 5, Taira et al teach navigation management information includes source packet identification information for corresponding one of said plurality of video blocks (e.g. figure 11, Logical Block Number of Navigation Pack or start presentation time of VOB can be a source packet identification of the VOB).

For claim 7, Taira et al teach navigation management information includes an indicator for indicating a stream type information of the video data, said indicator corresponding to one of said plurality of video data block (e.g. figure 11, "category of Video Object" corresponds to the claimed stream type information).

For claim 8, Kato et al teach navigation management information includes offset information regarding I-picture pointing to an address of a last I-picture contained, said offset information corresponding to one of said plurality of video data blocks (e.g. paragraph 184, 299).

For claim 12, Taira et al teach angle change information corresponds to each of a plurality of video data blocks and the angle change information includes the address

of the last interleaved video unit in the corresponding video data block, each video data block including at least one entry point (e.g. figure 59, and paragraph 87).

For claim 35, Kato et al teach the navigation management file is separate from the clip file storing the video data, the clip file and the management file having different file name extension each other (e.g. figure 14, .rpls and clip corresponds to the claimed "extension", and paragraph 558 teach the playlist file and the clip information file are recorded separately).

For claim 36, Kato et al teach one or more playlist file, the playlist file including at least one playitem, the playitem identifying a playing interval in a reproduction path of the video data, the playitem indicating at least one management file, the file name extension of the playlist file being different to the file name extensions of the clip file and the management file (e.g. figure 14, each item of the playlist, for example 01001.rpls, has to have an playback interval).

For claim 27, Kato et al teach generating step includes encoding at least video data and multiplexing at least video to create a transport stream (e.g. figure 1, element 15 and 16 and paragraph 556).

For claim 28, Kato et al teach packetizing the transport stream into source packets in according with a format of optical disk (e.g. figure 1, source packetizer 19).

For claim 29, Taira et al teach analyzing the angle change information if the angle change is requested via an interface, and selectively changing the reproduction path based on the analyzed angle change information (e.g. paragraph 155-156, 358).

For claim 21, Kato et al teach a recording unit including a pickup unit to record the data on the recording medium (e.g. figure 1, write unit 22).

For claim 22, Kato et al teach an encoder configured to encode at least video data (e.g. figure 1, AV encoder 15); multiplexer configured to multiplex at least video data to create a transport stream according to control information of the controller (e.g. multiplexer 16); and a packetizer configured to packetize the transport stream from the multiplexer into source packet in accordance with a format of an optical disk (e.g. source packetizer 19), said packetizer is controlled by the controller (e.g. figure 1, controller 23).

For claims 25, 31, Taira et al teach ignoring the request for the angle change, if the request for the angle change is not permitted (e.g. paragraph 358).

For claim 23, Taira et al teach controller analyze the angle change information if the angle change is requested via an interface, and control the reproducing unit to selectively change the reproduction path based on the analyzed angle change information, the angle change information including at least one indicator for indicating whether the angle change is permitted or not (e.g. paragraph 154-157, 358).

For claim 32, Taira et al the controller is configured to control the reproduction unit to delay the angle change until a reproduction position reaches to the end of the video data block (e.g. figure 34, step ST56).

For claim 33, Taira et al the controller operably coupled to the user interface, is configured to perform the angle change based on the received request through the user interface (e.g. paragraph 154-157, 358).

For claim 34, Taira et al teach the reproducing unit includes a pickup unit to reproduce the data from the recording medium (e.g. figure 63, Disk Drive 30).

Applicant's amendment necessitated the new ground(s) of rejection presented in this office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEG § 706.07 (a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136 (a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period. Then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daquan Zhao whose telephone number is (571) 270-1119. The examiner can normally be reached on M-Fri. 7:30 -5, alt Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai Q, can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daquan Zhao/
Examiner, Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621